DB3X313N

Silicon epitaxial planar type

For small current rectification

■ Features

- Low forward voltage V_F and small reverse current I_R
- Low terminal capacitance C_t
- Halogen-free / RoHS compliant
  (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

■ Marking Symbol: 4N

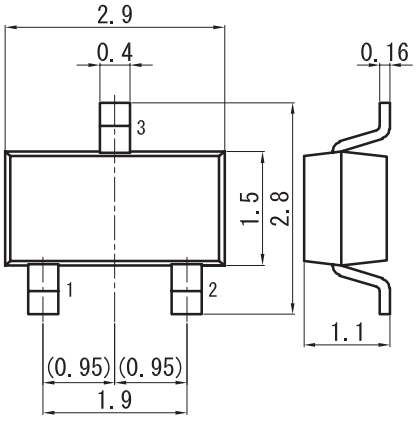
■ Basic Part Number

Dual DB2J313 (Common Cathode)

■ Packaging

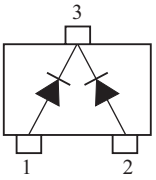
DB3X313N0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

Unit: mm



1: Anode-1 3: Cathode-1
2: Anode-2 Cathode-2

Panasonic	Mini3-G3-B
JEITA	SC-59A
Code	TO-236AA/SOT-23



■ Absolute Maximum Ratings $T_a = 25°C$

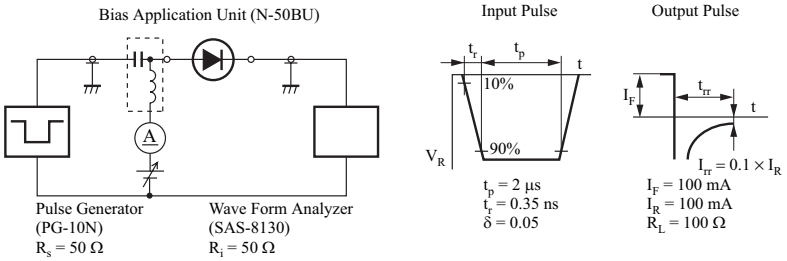
Parameter		Symbol	Rating	Unit
Reverse voltage		V_R	30	V
Repetitive peak reverse voltage		V_{RRM}	30	V
Forward current (Average)	Single	$I_{F(AV)}$	200	mA
	Double *1		130	
Peak forward current	Single	I_{FM}	300	mA
	Double *1		220	
Non-repetitive peak reverse surge voltage *2	Single	I_{FSM}	1.0	A
	Double *1		0.7	
Junction temperature		T_j	125	°C
Operating ambient temperature		T_{opr}	–40 to +85	°C
Storage temperature		T_{stg}	–55 to +125	°C

Note) ∗1: Value of each diode in double diodes used.
∗2: 50 Hz sine wave 1 cycle (Non-repetitive peak current)

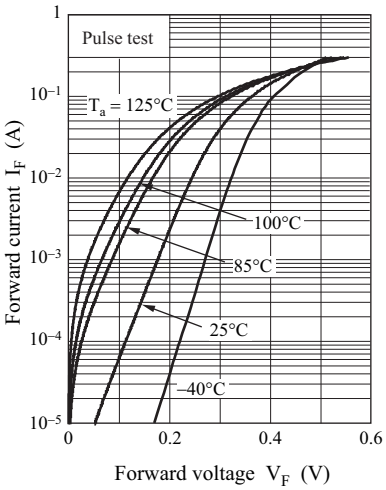
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V_F	$I_F = 200$ mA			0.55	V
Reverse current	I_R	$V_R = 30$ V			50	μA
Terminal capacitance	C_t	$V_R = 10$ V, f = 1 MHz		3.8		pF
Reverse recovery time *1	t_{rr}	$I_F = I_R = 100$ mA, $I_{rr} = 0.1 \times I_R$, $R_L = 100\ \Omega$		1.5		ns

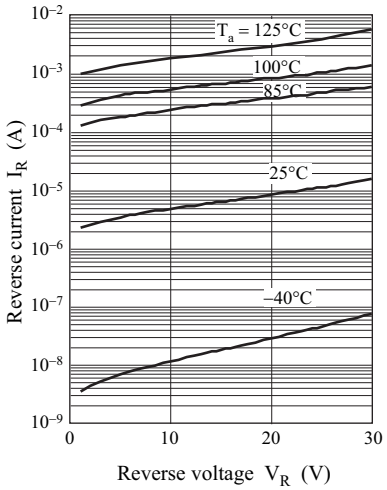
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 1 GHz
∗1: t_{rr} measurement circuit



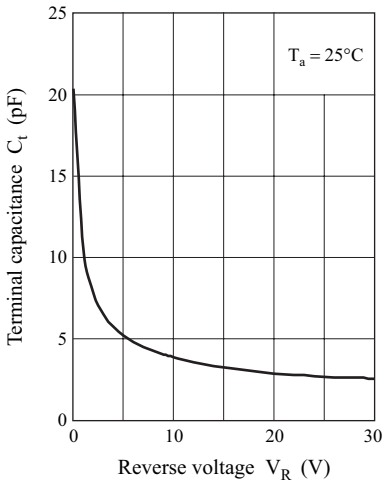
I_F — V_F



I_R — V_R

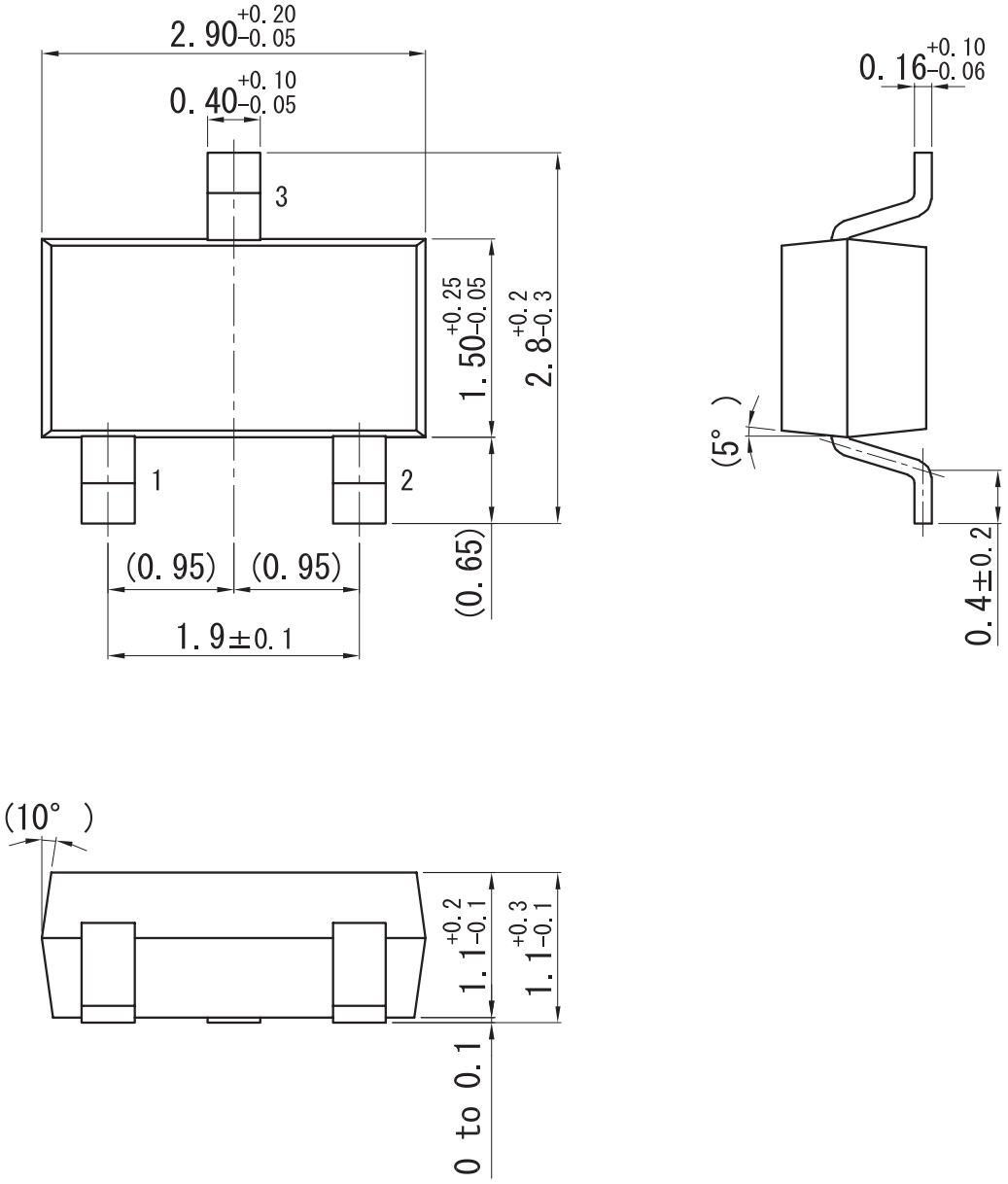


C_t — V_R

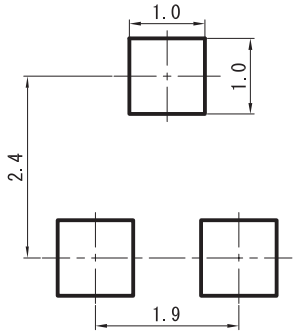


Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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